

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**TRO Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

HRSD-Virginia Initiative WWTP  
4201 Powhatan Road, Norfolk  
Permit No. TRO-60350

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, the Hampton Roads Sanitation District has applied for a Title V Operating Permit for its wastewater treatment facility with sludge incinerators at 4201 Powhatan Road, Norfolk, Virginia. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_

Date: \_\_\_\_\_

Air Permit Manager: \_\_\_\_\_

Date: \_\_\_\_\_

Deputy Regional Director: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment A: 02/13/73 Minor NSR Permit  
Attachment B: 06/29/99 Minor NSR Permit  
Attachment C: 40 CFR 61, Subpart E

## FACILITY INFORMATION

### Permittee

Hampton Roads Sanitation District  
PO Box 5911  
Virginia Beach, VA 23471

### Facility

Virginia Initiative WWTP  
4201 Powhatan Road  
Norfolk, VA 23505

County-Plant ID No. 51-710-00197

## SOURCE DESCRIPTION

NAICS Code: 221320 – Sewage Treatment Facilities

NAICS Code: 562219 – Non-hazardous Waste Treatment and Disposal

The Hampton Roads Sanitation District (HRSD) is a political subdivision of the Commonwealth of Virginia and was established as a governmental instrument to provide for the public health and welfare by abating water pollution in the Hampton Roads area through the interception of wastewater outfalls and providing wastewater treatment plants. All of the HRSD treatment plants are interconnected for diverting wastewater flow to alternate treatment locations as the area's daily amount of generated wastewater flow varies along with the operational capabilities of each plant. The Virginia Initiative WWTP provides both primary and secondary municipal wastewater treatment for the Hampton Roads area, serving mainly Norfolk clients. The Virginia Initiative WWTP is rated to treat a design maximum average dry weather flow rate of 40 million gallon per day (mgd). The facility process units are grouped into four main functions: liquids management, solids handling, sludge incineration, and electrical generators.

**Liquids management**--all of the unit processes that treat the received wastewater prior to discharge to the Elizabeth River. These unit processes include the septic tank truck unloading station, headworks (influent screening and pumping)/grit removal chamber, aerobic reactors, primary and secondary clarification, and disinfection contact basin.

**Solids handling**--unit processes that collect and treat the screenings and by-product solid materials from the liquid management section before it is sent to the sludge incinerator. These unit processes include the grit handling, raw and primary scum holding tank/concentrator, gravity thickeners, floatation thickener, dewatering centrifuges, biosolids screw conveyors, foreign biosolids storage and handling, biosolids belt conveyors, and ash storage/disposal.

**Sludge incineration**--two identical multi-hearth incinerators are used to dispose of dewatered solids from the solids handling sections. Each incinerator has 10 hearths, a dedicated induced-draft fan, and air pollution control equipment for particulate matter consisting of a pre-cooler, venturi scrubber, and an impingement (tray) scrubber. The incinerators can fire either natural gas or distillate oil as supplemental fuel in the combustion process.

**Electrical generators**—three diesel engine electrical generators use distillate oil. The electrical generators are used mainly for occurrences of normal power lost, but can also upon request be used to reduce the electrical demand for the local power company.

This facility is a Title V major source of SO<sub>2</sub>, CO, and NO<sub>x</sub>. This source is located in a non-attainment area for ozone. The facility is permitted under minor NSR permits issued on 02/13/73 and 06/29/99.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Incinerators							
I-1/I-2	2	Multi hearth sludge incinerators (natural gas or distillate oil as backup), 1973	21 burners rated at 2.7 MM BTU/hr each per incinerator. 45 dry tons/day (sludge) per incinerator	Pre-cooler with Venturi scrubber followed by impingement (tray) scrubber (water only). ARCO Products Model No. VS-37-JS-2070, 1973	ISBR-1/ ISBR-2	PM/PM-10 (Odor)	02/13/73 (State Only)
Liquids Management							
L-1	3	Liquids Management, 1943	40 mgd (dry) (wastewater)	Two stage packed tower scrubber (water plus NaOCl & NaOH). Ershings, 1990	LSBR-1/ LSBR-2	(Odor)	N/A (State Only)
Plant electrical generators							
G-1, 2, & 3	1a ,b, & c	Plant diesel engine electrical generators, 1991	15.6 MMBTU/hr (1600 kW), each				06/29/99

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement. (9 VAC 5-80-110 and Condition 4 of NSR permit issued on February 13, 1973 and Condition 2 of NSR permit issued on June 29, 1999)

## EMISSIONS INVENTORY

Emissions are summarized in the following tables.

### Actual Emissions

2004 Criteria Pollutant Emission in Tons/Year					
Emission Unit	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
Incinerators	6.1	111.5	173.2	3.1	18.0
Liquids Management	10.5				
Generators	0.3	1.6	0	0.2	8.6
Total	16.9	113.1	173.2	3.3	26.6

## EMISSION UNIT APPLICABLE REQUIREMENTS—Incinerators

### A. Limitations

Emission Limitations for Each Incinerator, I-1/I-2			
Regulated Pollutant	Limitation/Standard	Applicable Requirement	Reference EPA Test Method
Hg	3200 grams/24-hour period	40 CFR 61, Subpart E, Para 61.52 (b)	Method 101A, 105, or 29
PM	Less than 0.14 grains/dscf at 12% CO <sub>2</sub>	NSR permit condition 4.iii issued 02/13/1973	Method 5 and 202

From 02/23/73 permit:

**Fuel** – Condition 4 of NSR permit of 02/23/73 only stated the fuel as applied for in the application, which listed No. 2 fuel oil. The fuel types were further clarified in the title V permit (Condition III.A.1):

**Fuel** - The approved fuels for the incinerators are natural gas and distillate oil. Distillate oil shall meet the specifications below:

DISTILLATE OIL which meets the specifications for fuel oil/diesel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396 "Standard Specification for Fuel Oils" or ASTM D975 "Standard Specification for Diesel Fuel Oils."

A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 4 of NSR permit issued 02/13/73)

**Visible Emissions Limit** - Condition #4ii of the NSR permit of 02/13/73 listed: The visible emissions shall be less than 20% opacity. The VA new source standards for opacity (9 VAC 5-50-80) were not promulgated until 08/09/75--some two years after the 02/13/73 permit was issued. The introduction to the new source standards (9 VAC 5-50-10) specify that the standards apply to all new source activity that has been conducted after March 17, 1972. The new source opacity standards are 20-30%. The less than 20% with no more than one six-minute period that exceeds 30% are the normal opacity values that should be used for compliance. This was further clarified in the Title V permit (Condition III.A.2):

**Visible Emissions Limit** - Visible emissions from the incinerator stack shall be less than 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 4.ii of NSR permit issued 02/13/73)

From 40 CFR 61, Subpart E:

**Hg Emission Limits** - as listed in the table above, and also for plant changes.

**Plant Changes** - No changes can be made to the plant operations, after a stack test or sludge test has been conducted, which would potentially increase mercury emissions above the level determined by the most recent test, until the new emission level has been estimated by calculations and the results reported to EPA and DEQ.

(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d)(4) & 61.54(e))

**B. Monitoring**

**Fuel Certification** - The permittee shall obtain a certification from the fuel supplier for each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of distillate oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil/diesel oil numbers 1 or 2.
- (9 VAC 5-80-110 and Condition 4 of NSR issued 02/13/73)

## CAM for PM

### WET SCRUBBER SYSTEM FOR PM CONTROL FOR EACH INCINERATOR

#### I. Background

##### A. Emissions Unit

Description: Multiple Hearth Incinerators for Sewage Sludge  
Identification: I-1 & I-2  
Facility: HRSD VIP WWTP, Norfolk, VA

##### B. Applicable Regulation, Emission Limits, and Monitoring Requirements

Regulation: NSR permit dated 02/13/73  
CAM Emission Limits: Particulate matter: 0.14 grains/dscf @ 12% CO2

##### C. Control Technology, Capture System, Bypass, PTE:

Controls: Precooler, Venturi, and Impingement Scrubber  
Capture System: Closed-duct system  
Bypass: Emergency bypass damper  
PTE before controls: 713.3 TPY  
PTE after controls: 10.7 TPY

#### II. Monitoring Approach

The key elements of the monitoring approach are maintaining a minimum water flow rates to the precooler, venturi, and impingement wet scrubber as outlined in the following Table.

##### MONITORING APPROACH FOR EACH INCINERATOR IN OPERATION

Indicators	Minimum water flow rates for precooler, venturi & impingement wet scrubber
Measurement Approach	Water flow rate via roto/vortex/magmeters.
Indicator Ranges	An excursion when any average water flow rate is below: Precooler 29 gpm Venturi 50 gpm Impingement 171 gpm.
Data Representativeness	Inflow water meters for each piece of equipment.
Response to excursions	Maintenance will respond within two hours to make adjustments/repairs.
QA/QC	Zero flow check on each water flow meter prior to each incinerator start-up.
Monitoring Frequency	Water flow rate continuously measured by each meter; scale range is appropriate for each water flow meter as designated by the manufacturer.
Data Collection Procedures	Water flow rate is recorded (clock) hourly for each meter.
Averaging Period	Three (clock) hours average for each water meter (up to eight 3-hr averages per calendar day).

(9 VAC 5-80-110)



### III. Justification

EPA reference method 5 testing to establish compliant minimum water flow rates. The minimum water flow rates, identified in the table in Section II (above), are the 95% of the water flow rates noted during the stack test runs which showed compliance with the 0.14 grains/dscf.

The HRSD previous compliance stack testing demonstrated that HRSD facilities are three to five times below the particulate emission standard. This testing conducted during the first Title V permit cycle focused operations on the establishment of minimum water flows to the air pollution control devices (pre-cooler, venturi, and impingement tray) as the basis of ensuring continuous compliance and/or employing good air pollution control practices. No significant emphasis has been placed on venturi pressure drop in the compliance efforts to date. Hence, no real value is added by requiring the additional monitoring of venturi pressure drop. The CAM plan to increase the frequency of both scrubber water flow monitoring to hourly and adding visible emissions observations to once a month for the operating incinerators provides the needed assurances that the air pollution control equipment is being properly operated to meet the applicable regulatory standards. Therefore, the venturi pressure drop monitoring is not included in the required CAM plan for the Title V permit monitoring section.

**Visible Emissions Evaluations-** The permittee shall observe the incinerator stack (stack 2), for the operating incinerator (I-1 or I-2), one day during daylight normal operations within the first seven operating days of each month. If visible emissions are noted, a visible emissions evaluation (VEE) shall be conducted for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE average for the six minute period exceeds ten (10) percent, the VEE shall continue for one hour from initiation.

(9 VAC 5-80-110)

### C. **Testing--PM**

The source conducted PM testing during the first title V permit cycle (June 2000) and emissions were at 0.02 gr/dscf at 12% CO<sub>2</sub> (near 1/4 of standard) for dry sludge feed rate up to 55 ton/hr. PM testing will be required again if the feed rate exceeds 45 dry tons/hr (monthly average) to assure the air pollution equipment can maintain compliance.

**PM Stack Testing-** A stack test for particulate matter emissions shall be conducted on one incinerator (I-1 or I-2) within 60 days after either incinerator exceeds a 45 dry ton/day (monthly average) biosolids feed rate to determine compliance with the permit emission limits (**Table III.A.1**). If the stack test results for I-1 or I-2 show that PM emissions exceed 0.11 grains/dscf, the second incinerator must be stack tested within 12 months of the initial stack test. The test(s) shall be conducted, reported, and data reduced as set forth in 9 VAC 5-50-30, and test methods and procedures contained in EPA Method 5 and 202.

The details of the test(s) are to be arranged with and approved prior to testing by the Director, Tidewater Regional Office.

(9 VAC 5-80-110)

### Testing--Hg

Subpart E, Para 61.53(d) and 61.54, only requires an annual test for Hg if mercury emissions exceed 1,600 grams per 24-hour period--an incinerator stack test performed using Method 101A of 40 CFR 61, Appendix B; or the sludge be tested for mercury levels using Method 105 of 40 CFR 61, Appendix B.

The source conducted Hg testing during first title V permit cycle (June 2000) and used Method 29 for 40 CFR 503 stack emissions compliance and emissions were 35 grams/day (near 1/100 of standard). The source is required to test the sludge for Hg under 40 CFR 503 every 60 days.

Since all Hg past test results have been very low and with the 40 CFR 503 requirement of a continuing Hg sludge test requirement of every 60 days, **no** additional 40 CFR 61, Subpart E Hg compliance testing was required for this title V cycle permit. This issue for more Subpart E testing will be reviewed again at the next renewal.

Since the source is required to test if Hg emission levels exceed 1600 grams/24-hr period, the requirement for Hg testing was added if Subpart E proposed changes to the plant project the Hg levels to exceed 1600 grams/24-hr period.

**Hg Testing For Plant Changes** – If plant changes project Hg emissions to exceed 1600 grams/24-hr period, a test for the level of Mercury emissions from one incinerator (I-1 or I-2) shall be conducted within 60 days after the changes has been implemented. The sludge shall be tested for mercury levels using Method 105 of 40 CFR 61, Appendix B and following the requirements of 40 CFR 60.54(c) through 60.54(d), or an incinerator stack test performed using Method 101 A of 40 CFR 61, Appendix B and following the requirements of 49 CFR 60.53(d)(4) or Method 29 of 40 CFR 60, Appendix A. The details of the test(s) are to be arranged with and approved prior to testing by the Director, Tidewater Regional Office.

(9 VAC 5-80-110 and 40 CFR, Subpart E, 61.55(a))

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	EPA Test Method
PM/PM-10	Methods 5, 201, or 202
HG	Methods 101A, 105, or 29
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

### D. Reporting

**Stack Test Protocol-** Submission of the test protocol for the proposed incinerator particulate matter stack test shall be sent to the Director, Tidewater Regional Office at least 30 days prior to the test date.

(9 VAC 5-80-110)

**Stack Testing Date** - Notification of proposed stack test date(s) for particulate matter

shall be sent to the Director, Tidewater Regional Office at least 10 days prior to testing date(s).  
(9 VAC 5-80-110)

**Stack Test Results Report** - Two copies of the particulate matter test results report for the incinerator shall be sent to the Director, Tidewater Regional Office within 45 days of completion.  
(9 VAC 5-80-110)

**Proposed Plant Changes** - Notification of proposed changes to the plant operations which would potentially increase mercury emissions above the level determined by the most recent test under 40 CFR 61, Subpart E, shall be sent 30 days prior to implementing such changes along with the new calculated mercury emissions to the Director, Tidewater Regional Office and EPA.  
(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d)(4) & 61.54(e))

**Any Mercury Tests Conducted for 40 CFR 61, Subpart E** - Notification of proposed stack test date(s) or sludge sampling date(s) for mercury emissions shall be sent to the Director, Tidewater Regional Office and EPA at least 30 days prior to testing dates.  
(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d))

**Any Mercury Tests Conducted for 40 CFR 61, Subpart E** -The stack test determination or sludge test determination for mercury emissions shall be completed within 30 days of sample collection. Each mercury emissions determination shall be dispatched within 15 calendar days of determination via registered letter to Director, Tidewater Regional Office and EPA.  
(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d))

**Notices for EPA** – Notices for EPA will be sent to:  
U.S. EPA, Region III  
Air Protection (3AP12)  
Attn: 40 CFR 61 Subpart (E) Coordinator  
1650 Arch Street  
Philadelphia, PA 19103-2029  
(9 VAC 5-80-110)

## **E. Recordkeeping**

All Fuel certifications.

The scrubber water flow rates for PM control and any excursions with actions taken for corrections.

Any sludge test or stack test results for mercury emissions.

Any stack test results for PM emissions from the tested incinerator with those PM emission factors used for making emission estimates from both incinerators unless emission factors are established for each incinerator by its own stack test.

Visible emissions checks and visible emissions evaluations.

PM CAM monitoring records.

Operating procedures, maintenance records, and operator training records.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

## **EMISSION UNIT APPLICABLE REQUIREMENTS—Liquids Management**

### **A. Limitations**

The Liquids Management (L-1) shares the same odor scrubbing system with Solids Handling (S-1) operations. Since the Solids Handling is a new source (constructed after 1972), the addition of the scrubbing system in 1998 to control fugitive odor emissions would have to meet the most stringent of opacity standards for the existing source L-1 (20-60%) or the new source S-1 (20-30%); which would be the new source levels of 20-30%

**Visible Emission Limit** - Visible emissions from the scrubber stack (stack 3) shall not each exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110 and 9 VAC 5-50-80)

### **B. Monitoring**

L-1 (Liquids Management): No monitoring. A visible emissions check will not be required for the scrubber (stack 3). This system only collects fugitive gases and uses water (plus dissolved NaOCl & NaOH) as the main scrubbing agent. With no particulate input and the system not being designed as a particulate control system, there is no reason to check opacity from such a system.

## **EMISSION UNIT APPLICABLE REQUIREMENTS—Electrical Generators**

A. Limitations—see NSR Permit dated June 29, 1999.

B. Monitoring—see NSR Permit dated June 29, 1999.

An addition visible emissions check was added since there was none specified time frames in the June 29, 1999 permit.

**Visible Emissions** - The permittee shall observe each generator stack (stack 1a, 1b, and 1c)

for visible emissions when the generator is under full plant load during the time period of the first routine maintenance that is performed after each 500 hours of operations for each generator. If visible emissions are noted, a visible emissions evaluation (VEE) shall be conducted for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the six minutes exceeds five (5) percent, the VEE shall continue for one hour from initiation.  
(9 VAC 5-80-110) and Condition 8 of June 29, 1999 Permit)

- C. Recordkeeping—see NSR Permit dated June 29, 1999  
Added the records for each generator operating hours and the Visible Emissions checks.
- D. Reporting—see NSR Permit dated June 29, 1999.

### **Streamlined Requirements**

The following conditions in the minor NSR permit of February 13, 1973, have been streamlined into the Title V permit:

- Condition 1. Progress reports for construction of incinerators were submitted until operations began. No further reporting is required.
- Condition 2: Stack testing of new incinerators was accomplished after operations began.
- Condition 3: Notifications of proposed stack testing was accomplished.
- Condition 4.1: Section IX of the Title V permit lists State-Only Enforcement issues. Odor is not only an issue for the incinerators but the entire facility (liquids management, solids handling, etc.). The source is complying with Article 5-2 for BACT on odor control for the incinerators by using the scrubber system to control PM on the incinerators. The CAM requirements for monitoring the incinerator scrubber system is a way to also monitor odor control for the incinerators. If PM emissions are minimized, odor is expected to be minimized.

The following conditions in the minor NSR permit of June 29, 1999 have been streamlined into the Title V permit by using the Title V boilerplate language on the same topic—NSR references were added to the Title V regulatory citations.

- Condition 1. Used Title V condition VIII.K
- Condition 2. Used Title V condition II
- Condition 9 & 11 Used Title V condition VIII.G
- Condition 12. Used Title V condition VIII.R
- Condition 13 Used Title V condition VIII.A
- Condition 14 Used Title V condition VIII.P
- Condition 15 Used Title V condition VIII.W
- Condition 16 Used Title V condition VIII.U
- Condition 17 Used Title V condition VIII.M.1
- Condition 18 Used Title V condition VIII.T

The following conditions in the 40 CFR 61, Subpart E have been streamlined out of the Title V permit:

Para 61.63 (d)(2)(i) and 61.54(a)(2): Initial testing of existing source. Source conducted this testing as required in the 1970's.

Para 61.55(a): Monitoring. Not required as source has no emissions at the specified level to require more testing.

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

### **Comments on General Conditions**

#### **B. Permit Expiration**

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general condition cite(s) the Article(s) that follow(s):  
Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources]

This general condition cites the sections that follow:

- 9 VAC 5-80-80. Application
- 9 VAC 5-80-140. Permit Shield
- 9 VAC 5-80-150. Action on Permit Applications

#### **F. Failure/Malfunction Reporting**

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

#### **J. Permit Modification**

This general condition cites the sections that follow:

- 9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
- 9 VAC 5-80-190. Changes to Permits.
- 9 VAC 5-80-260. Enforcement.
- 9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
- 9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas]

#### **U. Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

#### **Y. Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos. This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

#### **Inapplicable Requirements**

40 CFR 61, Subpart C, NESHAP for Beryllium. Subpart C was intended for a facility that uses beryllium or generates beryllium wastes and then disposes of it. Any beryllium found in the sludge is insignificant and incidental to main purposes of the sludge incinerators.

40 CFR 60, Subpart O, NSPS for Sewage Treatment Plants. Subpart O was effective June 11, 1973, for new or modified sludge incinerators. This plant began construction before this date--per 02/13/73 NSR permit.

40 CFR 63, Subpart VVV, NESHAPS for New and reconstructed major HAPS POTWs. This source is not a major source for HAPS.

40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. This source does not store a VOC liquid product that is subject to the NSPS.

## Insignificant Emission Units

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
ISU-CB-31	Emergency Generator	5-80-720 C.4	N/A	107 HP (80 kW)
ISU-CB-48	Portable emergency electrical generator	5-80-720 C.1a	N/A	25,470 Btu/hr (diesel)
ISU-T-49/50	Distillate oil AST 275/265 gal, each	5-80-720 B.2	VOC	N/A
ISU-T-33a/33b Distillate oil (NSPS exempt)	Distillate oil ASTs 20,000 gal each (installed after 1984)	5-80-720 B.2	VOC	N/A
ISU-T-42	Gasoline UST 1,000 gal	5-80-720 B.2	VOC	N/A
ISU-T- 32a/32b/32c/32d	Distillate oil ASTs 20,000 gal each (installed prior to 1984)	5-80-720 B.2	VOC	N/A
Solids Handling	unit processes for solid by-products sent to incinerators	5-80-720 B.2	VOC	40 MGD (dry)

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

### CONFIDENTIAL INFORMATION--None

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

### State Only Requirements

Existing Source Standards for Hydrogen Sulfide, 9 VAC 5-40-290

Existing Source Standards for Toxics; 9 VAC 5-60-220



Existing Source Standards for Odor; 9 VAC 5-40-140  
New Source Standards for Odor, 9 VAC 5-50-140  
New Source Standards for Toxics; 9 VAC 5-60-320

THE LISTED VA REGS HAVE NOT BEEN INCORPORATED INTO THE VA SIP.

**PUBLIC PARTICIPATION, CONCURRENT review.**

The draft permit was placed on public notice in the Virginian Pilot from September 24, 2005 to October 22, 2005. Comments: None

Draft and proposed permit sent to affected state (NC) on: September 24, 2005.

Draft and proposed permit to EPA: September 24, 2005. Comments: None.